

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT (EPCRA)
SECTION 313 INSPECTION REPORT

U.S. Environmental Protection Agency
Region VII
Environmental Sciences and Technology Division

Clean Harbors Environmental Services, Inc.
2247 South Highway 71
Kimball, Nebraska 69145

Telephone Number: (308) 235-8200

TRI Facility I.D. Number: 69145CLNHR5MISO

Inspection Date: June 13-14, 2017

INTRODUCTION

At the request of the Air and Waste Management Division, the Environmental Sciences and Technology Division/Environmental Field Compliance Branch conducted an announced Emergency Planning and Community Right to Know Act (EPCRA §313) inspection of Clean Harbors Environmental Services, located in Kimball, Nebraska. The EPCRA §313 inspection was conducted in conjunction with a Resource Conservation and Recovery Act (RCRA) Compliance Evaluation Inspection (CEI). Findings from the RCRA inspection can be found in a separate report. During the CEI, a Level B multimedia screening inspection was performed. Please see Attachment 1 for a copy of the multimedia screening inspection checklist.

PARTICIPANTS

Clean Harbors Environmental Services, Inc. (CHESI):
Jessica Zebre, Senior Compliance Manager (jessica.zebre@cleanharbors.com)
Kelly Whittlesey, Incineration Blends Chemist
Brad Reader, General Manager
Gerald Pennel, Facility Incineration Manager
James Shields, Facility Operations Manager
Doug Moench, Operations Manager
Kelly Dunegan, Operations Manager

U.S. Environmental Protection Agency (EPA):
Sean P. Bergin, Environmental Scientist
Kenneth Herstowski, Environmental Engineer

INSPECTION PROCEDURES

On June 7, 2017, I contacted Ms. Zebre and scheduled an inspection of CHESI for June 13, 2017, to determine the compliance status of CHESI with the EPCRA §313 Toxic Release Inventory (TRI) reporting requirements for the reporting years 2011 through 2015. Later the same day I e-mailed the Region 7 TRI Inspection Checklist to Ms. Zebre.

Mr. Herstowski and I arrived at the CHESI facility on June 13, 2017, at approximately 8:00 a.m. We proceeded to the security office where we signed in and met with Ms. Zebre, who escorted us to a conference room in the administration building. We presented our credentials to Ms. Zebre and explained the purpose of the inspections. After our initial discussions we conducted a visual inspection of the facility.

During the visual inspection I viewed the container storage areas, container processing areas, storage tanks, and control devices with a FLIR Systems model no. GF320 infrared (IR) optical gas imaging camera to detect hydrocarbons and record video images if necessary. Mr. Herstowski, Ms. Whittlesey, and I conducted leak detection monitoring of valves, pumps, connectors, closure devices, pressure relief devices, and agitators during the inspection following 40 CFR Part 60, Appendix A, Method 21 procedures (Method 21). Mr. Herstowski and I used TVA-1000B flame ionization detectors (FID) and Ms. Whittlesey used a TVA-2020 FID. I also met with Ms. Whittlesey, who performs the Method 21 monitoring for CHESI. Ms. Whittlesey explained and demonstrated to me how she calibrates the monitoring equipment used for the Clean Harbors Method 21 monitoring program. Following the visual inspection Mr. Herstowski and I reviewed records of equipment inspections, personnel training, and the Method 21 monitoring program.

On June 14th, 2017, Mr. Herstowski and I returned to CHESI and reinspected certain areas of the facility. Once we returned to the office, I asked Ms. Zebre questions concerning the CHESI TRI program. Ms. Zebre read and signed the Notice of Inspection form (Attachment 2). Ms. Zebre provided me with a CD containing spreadsheets of Clean Harbors emissions calculations and threshold determinations for the years 2011 through 2015 (Attachment 3). Ms. Zebre and I discussed the facility processes, the flow of chemicals through the facility, and chemical storage. We also discussed the calculations used to determine the release, disposal, transfer, and treatment of the chemicals.

At the conclusion of the inspection, I discussed my initial observations with Ms. Zebre. Ms. Zebre signed and was provided a copy of the Confidentiality Notice (Attachment 4) and a Receipt for Documents and Samples (Attachment 5).

PROCESS/FACILITY DESCRIPTION

CHESI is an industrial waste treatment and storage facility. Waste is stored on-site in preparation for treatment or off-site treatment and disposal. CHESI stores and treats liquid, sludge, and solid hazardous and non-hazardous waste. Waste stored on-site is incinerated or is shipped off-site for disposal. Facilities that dispose of waste by processing or destruction have a

Standard Industrial Classification (SIC) number 4953 and a North American Industry Classification System (NAICS) number 562211.

Waste is incinerated with a thermal oxidation unit. Emissions are controlled by a spray dryer and baghouse. The oxidizer is equipped with a continuous emissions monitoring system. Most of the incinerator ash is landfilled on-site.

CHESI operates under a RCRA permit of which Part 1 was issued by the Nebraska Department of Environmental Quality (NDEQ) on December 1, 2015, and Part 2 was issued by the EPA on May 29, 2009. The EPA modified Part 2 of the Permit on December 1, 2015, to make changes to conform to the Part 1 issued by the NDEQ. Part 1 and Part 2 of the permit were modified on December 30, 2016, to authorize a paint can shredder as a miscellaneous unit.

CHESI operates under a Title V air emissions operating permit issued on August 6, 2009, and reissued with significant revisions on August 11, 2011.

CHESI currently employs approximately 150 people. CHESI activities include the manufacture, process, or otherwise use of toxic chemicals in excess of the applicable thresholds, and are subject to TRI reporting requirements.

DOCUMENT REVIEW AND POST-INSPECTION

CHESI's TRI calculations and threshold determinations were conducted by a contractor for the years 2011 and 2012. CHESI performed their own calculations and determinations for the reporting years 2013 through 2015.

CHESI uses a waste profile evaluation process to prescreen waste before it can be accepted at the facility. A waste that has been accepted is inspected and sampled once it arrives on-site (a minimum of 10 percent of containers received are sampled) to insure that the waste is properly identified. Wastes that are received are either repackaged and shipped offsite for disposal, or are incinerated. Most of the incinerator ash produced is landfilled on-site. Using the waste profile evaluation and the results of the sampling and inspection procedures conducted on-site, all chemicals received, by weight, are known.

The spreadsheets received are all similar in setup. Referring to the 2015 spreadsheet, all wastes received by CHESI in 2015, and either shipped off-site or incinerated on-site, are listed in the first tab, "lbs. INCN and sent off-site", followed by the summary tab which lists all chemicals reported to TRI. Other tabs include fugitive emissions calculations, TRI chemical thresholds, and tabs for dioxin and acid production. Emission factors are based on published data, CHESI Trial Burn test results, and recent stack tests.

I reviewed the calculations and methodologies used for the calculations and they appear to be reasonable. CHESI appears to have considered all chemicals otherwise used or manufactured on-site.

I also reviewed the threshold amounts used by CHESI to determine whether a Form R must be submitted or not. CHESI uses a threshold amount of 10,000 pounds (lbs.) for all but the persistent, bioaccumulative, and toxic (PBT) chemicals and acids. This is appropriate because otherwise use includes the on-site disposal, treatment for destruction, or stabilization of toxic chemicals, and acids are manufactured on-site. Of the PBT chemicals, errors were found in the threshold amounts used for Aldrin, chlordane, and heptachlor in the 2015 spreadsheet; hexachlorobenzene and tetrabromobisphenol A in 2014; and hexachlorobenzene in 2013, as shown in the table below.

Year	Chemical	TRI Threshold (lbs.)	Threshold Used by CHESI (lbs.)
2015	Aldrin	10	10,000
	Chlordane	10	100
	Heptachlor	10	100
2014	Hexachlorobenzene	10	10,000
	Tetrabromobisphenol A	100	10,000
2013	Hexachlorobenzene	10	10,000

Because of these threshold errors, CHESI failed to submit a Form R for Aldrin in 2015, hexachlorobenzene in 2014, and hexachlorobenzene in 2013. The other chemicals that were assigned incorrect thresholds were not otherwise used in quantities above the correct threshold amount. On July 10, 2017, I emailed a Notice of Preliminary Findings (NOPF) to Ms. Zebre at CHESI for the failure to submit Form R reports for Aldrin (2015) and hexachlorobenzene (2014 and 2013) (Attachment 6). Ms. Zebre replied that day and emailed me the receipts demonstrating that the Form R reports had been submitted for the chemicals (Attachment 7).


SUMMARY

I conducted an EPCRA Section 313 inspection of Clean Harbors Environmental Services, located in Kimball, Nebraska.

CHESI is subject to the TRI reporting requirements.

CHESI failed to report Aldrin in 2015 and hexachlorobenzene in 2014 and 2013. An NOPF was issued for the failure to report. CHESI replied to the NOPF and has submitted the Form R's.

CHESI appears to be maintaining the necessary information and performing the calculations necessary to demonstrate compliance with the EPCRA §313 Toxic Release Inventory reporting requirements.


Sean P. Bergin
Environmental Scientist
Date: 7/12/2017

Attachments:

1. Multimedia Screening Checklist, 2 pages.
2. Notice of Inspection, 1 page.
3. Threshold Determinations and Emissions Calculations, 2011 through 2015, CD.
4. Confidentiality Notice, 1 page.
5. Receipt for Documents and Samples, 1 page.
6. NOPF, 1 page.
7. NOPF Response, 3 pages.

